

MICROMPHALE (COLLYBIOPSIS) TRABUTII (Maire) Honrubia
 nov. comb., in Spain.

New MARASMIACEAE Roze, family Names¹

by M. HONRUBIA*

SUMMARY. — *Micromphale trabutii* (Maire) Honrubia nov. comb. is proposed. *Marasmius delilei* De Seynes is discussed and proposed as a «possible» synonym to *M. trabutii*. Others nov. comb. are proposed for the family Marasmiaceae Roze.

RESUMEN. — *Micromphale trabutii* (Maire) Honrubia comb. nov., en España. Otras comb. nov. de la familia Marasmiaceae Roze. — Se propone *Micromphale trabutii* (Maire) nov. comb. *Marasmius delilei* De Seynes es discutido y propuesto como posible sinónimo de *M. trabutii*. Son propuestas otras comb. nov. en la familia Marasmiaceae, Roze.

RÉSUMÉ. — Description de *Micromphale trabutii* (Maire) Honrubia comb. nov., en Espagne. Nouvelles combinaisons dans la famille des Marasmiaceae Roze. Discussion sur la synonymie possible entre *Marasmius delilei* De Seynes et *M. trabutii*. D'autres combinaisons nouvelles sont proposées dans la famille des Marasmiaceae Roze.

MOTS CLEFS : Marasmiaceae, *Micromphale trabutii*, *Marasmius delilei*, Espagne, Systématique.

INTRODUCTION

The *Ramealini* Kühner section of the genus *Marasmius* Fries, according to KÜHNER & ROMAGNESI (1953, 1974) includes practically the same species that MOSER (1978) proposes for the genus *Marasmiellus* Murriel, with the exception of two. *M. omphaliformis* Kühner, not considered by MOSER and re-found by Malençon in Morocco (MALENÇON & BERTAULT, 1975, p. 373). The enormous fundamental hyphae of flesh and trama of lamellae of this species, makes one consider that a *Megacollybia* Kotlaba & Pouzar, with spores non-amyloid, such as *Collybia platyphylla* (*Hydropus platyphyllus* (Pers. : Fr.)

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Kühner, KÜHNER, 1980 p. 895) is being dealt with. The second exception of Kühner's *Ramealini* and Moser's *Marasmiellus* is *Marasmiellus amadelphus* (Bull. : Fr.) Moser, unmentioned by KÜHNER & ROMAGNESI (1953, 1974) and by SINGER (1949, 1962, 1975).

KÜHNER (1980 p. 762) thinks that *Marasmiellus* Murr. should be considered synonymous with *Collybiopsis* (Schroet.) Earle, for reason of priority and, considering *Collybiopsis* in this way, it must be the transition between *Collybia* (Fr.) Staude and *Marasmius* Fries, taking into account the connecting points between the three genera.

On the other hand, KÜHNER (1980 p. 761, 896) thinks that *Collybiopsis* (= *Marasmiellus*) is a subgenus of *Micromphale*.

In this paper I propose six new combinations in the family Marasmiaceae Roze.

MATERIALS AND METHODS

Fresh material of *Micromphale trabutii* has been studied from El Saler (Valencia, Spain), on *Schoenus nigricans* L., in the *Schoeno-Plantaginetum crassifoliae* Br.-Bl. 1931. M. Honrubia 13/XI/82. This material is included in the Mycotheca of the University of Murcia, registered with the number MH 3381 available for reference or later revision.

We have studied Typus of *Marasmius trabutii* Maire, on *Scirpus holoschoenus* L., of the Herbarium R. Maire (MPU). We have also studied other material of *M. trabutii* taken from the Herbarium R. Maire (no 3893) on *Ruscus hypophyllus* L., which appears to belong to the same species.

Treatment of both fresh and dried material was that normally applied in macro- and microscopic studies.

MICROMPHALE TRABUTII (Maire) Honrubia nov. comb.

Basionym : *Marasmius trabutii* Maire, MAIRE, *Bull. Soc. Bot. Fr.* 56 : 278 279, pl. XX, fig. 15-23, 1909.

≡ *Marasmiellus trabutii* (Maire) Sing., *Lilloa* 22 : 300 «1949» 1951

= *Clitocybe caespitosa* Pat., in C.R. Congr. A.F.A.S. 1908. Sci. p. 248 1909, non Peck 1888.

= *Marasmiellus caespitosus* (Pat.) Sing., *Lilloa* 22 : 300 «1949» 1951

? *Marasmius delilei* De Seynes, in Lagarde, *Bull. Soc. Mycol. Fr.* 17 : 225 fig. 2, 1901.

Specimens of El Saler (MH 3381) have the following characteristics :

Pileus 7-15 mm broad, flat, slightly omphaloid, but never with papilla. Indented lobulated margin, slender, incurved striated at the lamellae junction. Cuticule adnate, powdery-pruinose white to off-white in fresh material, cream in dried. Stipe slender, cylindrical, 10-15 x 1 mm, olivaceous green to blackish pruinose-pubescent, centrally or sublaterally inserted, sub-bulbous. 8-12 lamel-

lae, slender and separated, with lamellulae between each pair of lamellae, slightly ventricose and sinuous, somewhat decurrent, white in fresh material, turning to cream on drying. Scarce lamellulae, with anastomosing veins from lamellae. Scarce white flesh. Slight smell of bleach. Slightly bitter taste. White spored (Fig. 1 A).

Pileipellis (*typus ramealis*), is formed by hyphae with excrescences, irregularly branching, with slender walls, with clamps, 7-11 μm broad, frequently impregnated with green wall pigment, (Fig. 1 B). Flesh of pileus is formed by thin-walled hyphae, with clamps, sometimes anastomosed, branching irregularly, hyalines, 4-5-6 μm broad. Fundamental hyphae of the flesh of thin-walled pileus, smooth, without incrustations 10.5-28.5 μm broad, neither amyloid, nor dextrinoid, nor cyanophyle. Brown stipe hyphae with KOH, with clamps. The thick (up to 2 μm) or thin-walled cortex hyphae are brown, with clamps, 5-8 μm broad, and more or less oval. These hyphae give rise to the superficial tomentose hairs, which have thin-walls and clamps, and are progressively less pigmented towards the apex. Basal bulbous hyphae similar to external stipe ones. Internal stipe hyphae with clamps and not pigmented, neither amyloid, nor dextrinoid, nor cyanophyle, 3.5-14 μm broad. Irregular trama of lamellae formed by hyphae 3-8 μm broad embedded in gelatinous matter. Basidia 4-spored clavate, 40-50 x 8-12 μm broad (Fig. 2 B). Marginal hairs of lamellae 35-45 x 6-8 μm broad, more or less abundant, intermixed with basidia, tortuously clavated (Fig. 2 C). Spores 12-15-18 x 5-6.5 μm broad, lacrymoid to obovate, smooth, hyaline, non-amyloid, with 1 or 2 internal lipid guttulae (Fig. 2 A).

DISCUSSION

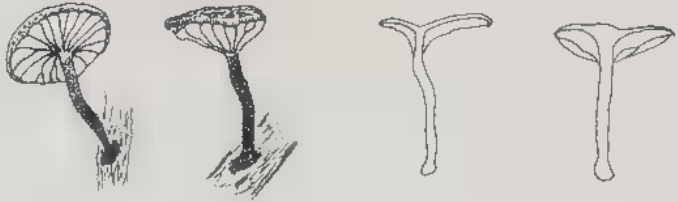
KÜHNER (1980) proposes that *Marasmiellus* Murr. is synonymous to *Collybiopsis* Earle ex Schroeter. He includes the concept of both genera in *Micromphale* Nees ex S.F. Gray concept. As already stated in our introduction, we agree with Kühner's new taxonomy. On the other hand, we also agree with NOORDELOOS (1983) in considering *M. caespitosus* (Pat.) Sing. synonymous to *M. trabutii*, but not the contrary.

We therefore propose the above-mentioned comb. nov.

M. tricolor and *M. candidus* are similar to *Micromphale trabutii*. KÜHNER & ROMAGNESI (1974) include these species in the *Ramealini* Kühner section. NOORDELOOS (1975) considers *M. tricolor* different from *M. trabutii* because of the latter's dried lamina colouring, the size of its spores and its typical marginal hairs. In the case of *M. candidus*, there are more evident differences since this taxon lacks hyphae with excrescences in its pileipellis.

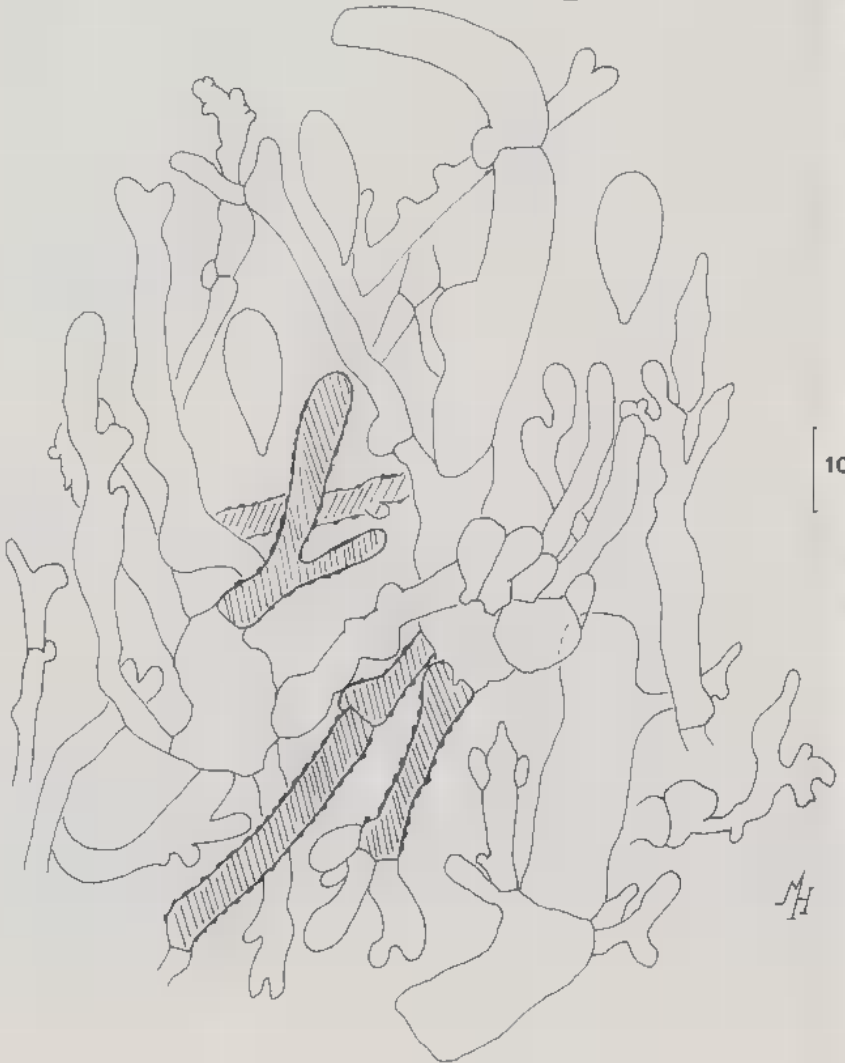
MAIRE (1909) mentions two other species similar to his. *Marasmius arenivagus* Britz. : «dont il paraît différer toutefois par sa taille plus grande, par son pied plus pâle, radicaire (peut-être parce qu'il naît sur des racines enfoncées dans le sable ?) par ses lamelles étroites et enfin par ses spores atténuées et non

A



5 mm

B



10 μm

HL

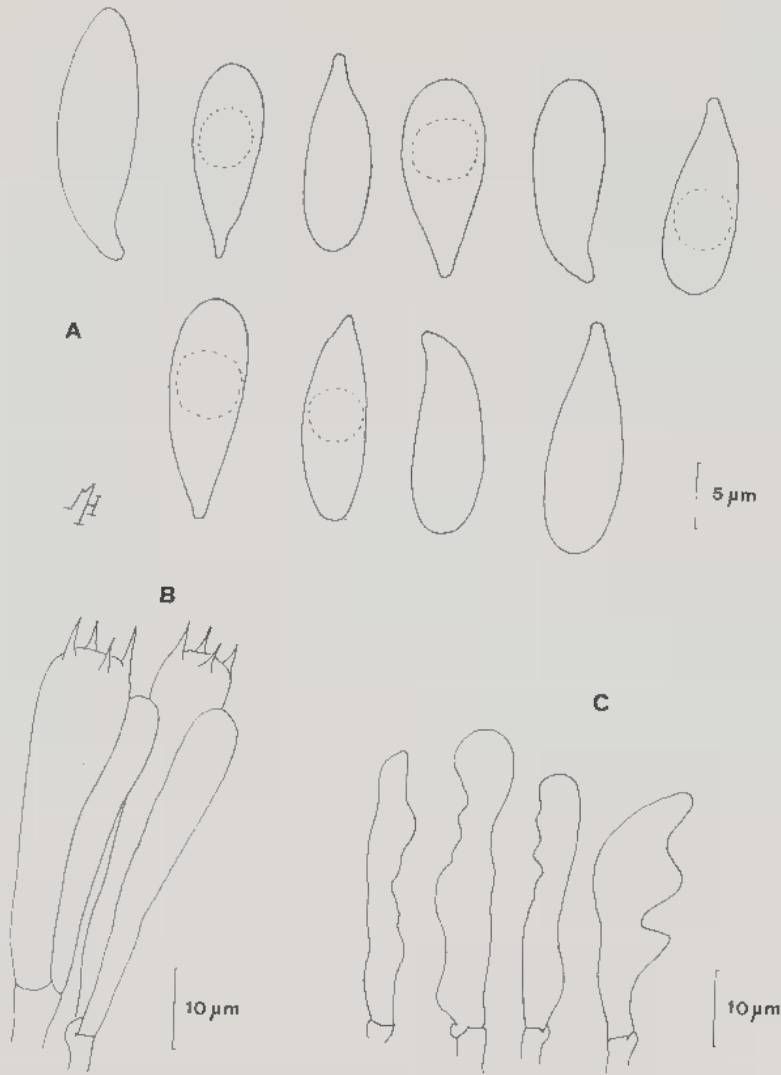


Fig. 2. — *Micromphale (Collybiopsis) trabutii* (Maire) nov. comb. MH 3381. A : Spores. B : Basidia. C : Cheilocystidia.

Fig. 2. — *Micromphale (Collybiopsis) trabutii* (Maire) nov. comb. MH 3381. A : Spores. B : Basides. C : Cheilocystides.

Fig. 1. — *Micromphale (Collybiopsis) trabutii* (Maire) nov. comb. MH 3381. A : Fruit-body. B : Pileipellis : hyphae with excrescences and pigment-walled hyphae.

Fig. 1. -- *Micromphale (Collybiopsis) trabutii* (Maire) nov. comb. MH 3381. A : Fructification. B : Pileus : hyphes avec granulations et hyphes pigmentées.

arrondies au sommet». Having studied the description and plate of *M. arenivagus* Britz. that M. Malençon (*in litt.*) courteously sent us, we observed that the spores illustrated are obviously fusoid, which makes Britzelmayr's species different from *M. trabutii*. The second species is *Marasmius delilei* De Seynes. A manuscript and plate of Delile describes an out-of-use taxon, similar to *M. trabutii*. MAIRE (1909) took this into account, identifying his species at first as *Marasmius delilei* De Seynes var. *velutipes* Maire, as is shown by his labelling of *M. trabutii* Typus. He later distinguishes both species by the glabrous stipe and closer laminae in *M. delilei*. These differences are, «a priori», of little importance; thus *M. delilei* could possibly be considered as priority eponymous as indicated by M. Malençon (*in litt.*). However, the complete absence of dried material of *M. delilei* does not allow us to state this definitely. In any case, it is curious in the least that a species of which the author comments «qui abonde dans les marais de la Camargue», has not later been found. In his original (*inéd.*) manuscript and plate, DELILE names this small fungi as *Agaricus scirpi-holoschoeni*, because of its habitat. DE SEYNES (1863) publishes Delile's description as *Agaricus amadelphus* var. *alba stipitenigro*, adding «Je pense qu'une étude plus approfondie me permettra peut-être de la séparer spécifiquement de l'*A. amadelphus*». This results in LAGARDE (1901) publishing De Seynes's notes. According to the latter, *M. delilei* is similar to *M. amadelphus*, *M. ramealis*, *M. candidus* and *M. vaillantii*. DE SEYNES prefers the epithet «*delilei*» to that of *scirpi-holoschoeni* for «having found this fungi on other plants». In the diagnosis he notes its «stipite brevi, glabro ...» characteristic which enables MAIRE to establish the differences to his *M. trabutii*. DE SEYNES (in LAGARDE, 1901) distinguishes his *M. delilei* from *M. amadelphus* by «Les bords gaufrés» and from *M. candidus* by «les dimensions et par la forme des spores, enfin la couleur du stipe, qui est lisse et non fariné ...».

This taxon *M. delilei*, must therefore be thought of as belonging to the *Ramealini* Kühner section, perhaps being able to be considered *M. trabutii*, especially if we take into account the habitat which both share. Moreover, Delile's plate has exactly the same morphology as El Saler's examples, with «nigro, sursum albicante, saepe excentrico, basi subbulbilloso» stipe, such as noted by DE SEYNES (in LAGARDE, 1901). The characteristics of pileus and lamellae, without being absolutely definite, co-incide with those of our own material, by which we suppose that the same taxon is involved. Nevertheless, due to the above-mentioned absence of dried material, we prefer to include *M. delilei* as a possible synonym of *M. trabutii*, at least till we are able to study samples collected in La Camargue (Montpellier, France) and compare microscopic and anatomic aspects of the pileus and stipe. In case our Saler (Valencia) samples would be identical to samples from La Camargue (same taxon), it would be necessary to consider the De Seynes name as priority. Then one could chose a topotypus or alternatively we could use as a typus the Delile plate published by DE SEYNES (in LAGARDE, 1901).

The well-adjusted ecology of this species allows us to conclude that it is a halophilic fungus in the sense that it grows on salt requiring plant species.

Various authors note it on : *Juncus maritimus* Lam. (NOORDELOOS, 1975), *Scirpus holoschoenus* L. var. *australis* (Murr.) Koch. (MAIRE, 1909; DELILE notes it in his manuscript, on the self-same plant). *Erianthus ravennae* (L.) Beauv. (PATOUILLARD, 1909). We ourselves have found it on *Schoenus nigricans* L., coming from sheaths in various stages of decomposition. The above-mentioned plants are all salt marsh species.

In the same vegetable community : *Schoeno-Plantaginietum crassifoliae* Br.-Bl. 1931, we found *Marasmius epiphyllus* Pers. : Fr. on *Plantago crassifolia* Forsk., which we have conjecturally identified as var. *plantagineae* Heim, since there are no apparent differences to the typical *M. epiphyllus*, except referring to its ecology. M.G. Malençon (*in litt.*) has similarly stated that the «var. *plantagineae* Heim» is a «nomen nudum» for not having been presented with either description or justification of his specialisation on *Plantago*.

Proposed new names : family MARASMIACEAE Roze, 1876.

Hydropus omphaliformis (Kühner) Honrubia nov. comb.

Basionym : *Marasmius omphaliformis* Kühner, KÜHNER, *Bull. Soc. nat. Oyonnax*, n° 8, p. 75, 1954.

= *Marasmiellus omphaliformis* (Kühner) Noordel., *Persoonia* 12 (1) : 35, 1983.

Micromphale amadelphus (Bull. : Fr.) Honrubia nov. comb.

Basionym : *Agaricus amadelphus* Bull. : Fr., BULLIARD t. 550 f. 3 FRIES. *Epicrisis*, p. 380. *Hymenomycetes Europaei*, p. 474. 1874.

= *Marasmiellus amadelphus* (Bull. : Fr.) Moser.

Micromphale arenivagus (Britz.) Honrubia nov. comb.

Basionym : *Marasmius arenivagus* Britz., BRITZELMAYR. *Hymenomyceten aus Sudbayern*, t. 2. p. 464 f. 49. 1890.

Micromphale humillimus (Quél.) Honrubia nov. comb.

Basionym : *Collybia humillima* Quél., in *Cr. Ass. Fr. Av. Sc.* (La Rochelle, 1882) 11 : 389, 1883.

≡ *Marasmius humillimus* (Quél.) Quél., *Fl. Mycol.* : 316. 1888.

= *Marasmius flosculus* Quél. in *Bull. Soc. bot. Fr.* 25 : 289. 1879 (non Berk. 1842).

= *Marasmius anthocephalus* Sacc., *Syll. Fung.* 9 : 69. 1891.

= *Marasmiellus anthocephalus* (Sacc.) Sing. in *Pap. Mich. Acad. Sci.* 32 : 130. 1948.

= *Marasmius flosculus* Bataille in *Bull. Soc. Hist. nat. Doubs.* 30 : 80. 1919.

Micromphale trabutii (Maire) Honrubia nov. comb.

Basionym : *Marasmius trabutii* Maire, MAIRE *Bull. Soc. Bot. Fr.* 56 : 278-279, pl. 20. 1909.

≡ *Marasmiellus trabutii* (Maire) Singer

= *Clitocybe caespitosa* Patouillard

= *Marasmiellus caespitosus* (Pat.) Singer

? *Marasmius delilei* De Seynes

Micromphale tricolor (A.S. : Fr.) Honrubia nov. comb.

Basionym : *Agaricus tricolor* A.S. : Fr., ALB. et SCHW. t. 9, fig. 5. FRIES. Systema Mycologicum, I. p. 166, 1821. Hymenomycetes Europaei, p. 159. 1874.

≡ *Marasmius tricolor* (A.S. : Fr.) Kühner

= *Marasmiellus tricolor* (A.S. : Fr.) Singer

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